

## **SECTION 11**

### **TOWN OF CHARLESTOWN, NEW HAMPSHIRE PERSONAL WIRELESS SERVICE FACILITIES ORDINANCE**

#### **1. PURPOSE AND AUTHORITY**

It is the express purpose of this Ordinance to permit carriers to locate personal wireless service facilities within the Town of Charlestown consistent with appropriate land use regulations that will ensure compatibility with the visual and environmental features of the Town. This Ordinance enables review of the location and siting of personal wireless service facilities by the Town of Charlestown so as to eliminate or mitigate the visual and environmental impacts of personal wireless service facilities. This Ordinance is structured to encourage carriers to locate on existing buildings and structures whenever possible. New ground mounted personal wireless facilities are permitted, but only when the use of existing structures and buildings is found to be infeasible. Co-location is encouraged for all personal wireless service facility applications and the review of a personal wireless facility shall be on the basis of the site being built using all positions on the mount.

This ordinance is adopted for the above stated purposes pursuant to the authority granted in RSA 674:16-21 and 674:43.

#### **2. APPLICABILITY**

No person shall, within the Town of Charlestown, build, erect, or install a personal wireless service facility, or a structure intended for use in conjunction with such a facility, without a building permit and Site Plan approval by the Planning Board, as detailed in Section 5 of this Ordinance. All provisions of the Site Plan Review Regulations shall apply, except where plainly inconsistent with this Ordinance. The Planning Board's decisions shall be within the time frame set forth in RSA 676:4, I(c), and shall be in writing with reasons as set forth in RSA 676:3. This Ordinance shall apply to personal wireless service facilities proposed to be located on property owned by the Town of Charlestown, on privately owned property, and on property that is owned by any other governmental entity that acts to lease such property to a carrier. In the case of a facility to be located on property of the Town of Charlestown, no lease or other agreement shall be deemed final until the terms of this Ordinance have been met.

#### **3. DEFINITIONS**

For the purpose of this Ordinance, the following terms shall have the meaning given herein:

- 3.1 Antenna: The surface from which wireless radio signals are sent and/or received by a personal wireless service facility.
- 3.2 Antenna Array: A collection of antennas attached to a mount to send and receive radio signals.
- 3.3 Average Tree Canopy Height: An average height found by inventorying the height at above ground level (AGL) of all trees over twenty (20) feet in height for a defined area, such as the area delineated in Section 7.2 (C).
- 3.4 Camouflaged: A personal wireless service facility that is disguised, hidden, part of, or placed within, either an existing structure, or a proposed structure which is intended and designed for use other than the mounting of personal wireless service facilities, and which is not modified for that use in any way which is obvious from the exterior of the structure.
- 3.5 Carrier: A Company that provides personal wireless services, also sometimes referred to as a provider.
- 3.6 Co-location: The use of a single mount on the ground by more than one carrier (vertical co-location) or the same carrier with multiple licenses, and/or the use of several mounts on an existing building or structure by more than one carrier or the same carrier with multiple licenses.
- 3.7 Equipment Shelter: An enclosed structure, cabinet, shed, vault, or box near the base of the mount within which are housed equipment for personal wireless service facilities such as batteries and electrical equipment. Equipment shelters are sometimes referred to as base transceiver stations.
- 3.8 Existing Structure: A structure existing at the time of an application under this Ordinance, which, at the time of its construction, was neither intended nor designed for the mounting of personal wireless service facilities, and which either was constructed prior to the adoption of the Zoning Ordinance, or conforms in all respects to applicable zoning regulations.
- 3.9 Facility: See Personal Wireless Service Facility.
- 3.10 Fall Zone: The area on the ground from the base of a ground mounted personal wireless service facility that forms a circle with a diameter equal to twice the height of the facility, including any antennas or other appurtenances, as set forth in Figure 1. The fall zone is the area within which there is a potential hazard from falling debris (such as ice) or collapsing material.

**See Figure 1**

- 3.11 Guyed Tower: A monopole or lattice tower that is secured to the ground or other surface by diagonal cables for lateral support.
- 3.12 Height: The height above ground level (AGL) from the natural grade of a site to the highest point of a structure.
- 3.13 Lattice Tower: A type of mount with multiple legs and structural cross bracing between the legs that is self-supporting and freestanding.
- 3.14 Mast: A thin pole that resembles a streetlight standard or a telephone pole. A dual-polarized antenna is typically deployed on a mast.

- 3.15 Monopole: A thicker type of mount than a mast that is self-supporting with a single shaft of wood, steel or concrete, or other material, that is designed for the placement of antennas and arrays along the shaft.
- 3.16 Mount: The structure or surface upon which antennas are mounted, including the following four types of mounts:
  - 1. Roof-mounted. Mounted on the roof of a building.
  - 2. Side-mounted. Mounted on the side of a building.
  - 3. Ground-mounted. Mounted on the ground.
  - 4. Structure-mounted. Mounted on a structure other than a building.
- 3.17 Personal Wireless Service Facility: Facility for the provision of personal wireless services, as defined by the Telecommunications Act of 1996, as amended. Personal Wireless Service facilities generally include a mount, antenna, equipment shelter, and other related equipment.
- 3.18 Personal Wireless Services: The three types of services regulated by this Ordinance: Commercial mobile radio services, unlicensed wireless services, and common carrier wireless exchange access services as described in the Telecommunications Act of 1996, as amended.
- 3.19 Radio Frequency (RF) Engineer: An engineer specializing in electrical or microwave engineering, especially the study of radio frequencies.
- 3.20 Radio Frequency Radiation (RFR): The emissions from personal wireless service facilities.
- 3.21 Security Barrier: A wall, fence, or berm that restricts an area from unauthorized entry or intrusion.
- 3.22 Separation: The distance between one carrier's array of antennas and another carrier's array.

#### **4. DISTRICT REGULATIONS**

- 4.1 Location – Personal wireless service facilities shall be permitted either as primary or accessory uses in all Zoning Districts. Applicants seeking approval for personal wireless service facilities shall first evaluate existing structures for the siting of personal wireless service facilities. Only after finding that there are no suitable existing structures pursuant to Section 4.3 herein, shall a provider propose a new ground mounted facility.
- 4.2 Existing Structures: Policy - Personal Wireless service facilities ~~shall~~ **may** be located on existing structures, including but not limited to buildings, water towers, existing telecommunications facilities, utility poles or towers, and related facilities, provided that such installation preserves the character and integrity of those structures.
- 4.3 Existing Structures: Burden of Proof – The applicant shall have the burden of proving that there are no existing structures which are suitable to locate its personal wireless service facility and/or to transmit or receive radio signals. To meet that burden, the applicant shall take all the following actions to the extent applicable:

- A. The applicant shall submit to the Planning Board a list of all contacts made with owners of potential sites regarding the availability of potential space for a personal wireless service facility. If the Planning Board informs the applicant that additional existing structures may be satisfactory, the applicant shall contact the property owner (s) of those structures.
- B. The applicant shall provide copies of all letters of inquiry made to owners of existing structures and letters of rejection. If letters of rejection are not provided, at a minimum, unanswered "Return Receipt Requested" forms from the U.S. Post Office shall be provided for each owner of existing structures that was contacted.
- C. If the applicant claims that a structure is not capable of physically supporting a personal wireless service facility, or that co-location cannot be achieved without radio frequency interference, a licensed professional civil or structural engineer must certify this claim. The certification shall, at a minimum, explain the structural issues and demonstrate that the structure cannot be modified to support the personal wireless service facility without unreasonable costs. The estimated cost shall be provided to the Planning Board.

4.4 Ground Mounted Facilities: Policy – If the applicant demonstrates that it is not feasible to locate on an existing structure, ground mounted personal wireless service facilities shall be designed so as to be camouflaged to the greatest extent possible in the judgment of the Planning Board including but not limited to: use of compatible building materials and colors, screening, landscaping, and placement within trees.

4.5 Study Conducted By Town: If the Planning Board is in doubt about whether the location requirements of this section have been met, it may require a review or independent investigative study to be undertaken at the expense of the Applicant by a consultant chosen by the Board.

## 5. USE REGULATIONS

A personal wireless service facility may be permitted in all zoning districts as follows, subject to the requirements of Site Plan Review and a building permit:

5.1 Existing Tower Structures: Carriers may locate a personal wireless service facility on any guyed tower, lattice tower, mast, or monopole in existence prior to the adoption of this Ordinance, or on any personal wireless service facility previously approved under the provisions of this Ordinance so long as the co-location complies with the previously approved site plan. Planning Board review for such locations shall take the form of Minor Site Plan Review, which shall be limited to issues relating to access, bonding and security for removal, structural integrity and appropriate camouflage of such siting. All the Performance Standards from this Ordinance shall be met. This provision shall apply only so

long as the height of the mount is not increased, a security barrier already exists, and the area of the security barrier is not increased.

- 5.2 Reconstruction of Existing Tower Structures: An existing guyed tower, lattice tower, monopole, or mast in existence prior to the adoption of this Ordinance may be reconstructed with a maximum twenty (20) foot increase in height so as to maximize co-location so long as the standards of this Ordinance are met and so long as this twenty (20) foot increase in height does not cause a facility previously existing at less than two hundred (200) feet to exceed two hundred (200) feet in height. The mount shall be replaced with a similar mount that does not significantly increase the visual impact on the community. Full Site Plan Review is required.
- 5.3 Existing Structures: A carrier may locate a personal wireless service facility on an existing structure, building, utility tower or pole, or water tower, subject to the provisions of this Ordinance and Minor Site Plan Review.
- 5.4 Ground Mounted Facility: A personal wireless service facility involving construction of a ground mount shall require full Site Plan Review subject to the provisions of this Ordinance.

## **6. APPLICATION REQUIREMENTS**

In addition to the applicable requirements of the Charlestown Site Plan Review Regulations, the Applicant shall provide the following information:

- 6.1 For All Applications: (a) Proof of legal authority of the Applicant to use the proposed site, for example, proof of ownership of the land or structure, or copies of any easement, lease or other contractual right to use the site; (b) Plans of the site, including landscaping, with all dimensions and other requirements of this Ordinance labeled and shown to be met by the plan; (c) A written description of the facility, and any support structures, and its coverage range, with a description of the technical reasons for its design; (d) An inventory of the location, design and height of the Applicant's other telecommunications facilities, either within, or within 2 miles of, the Town of Charlestown, with a statement of what role the proposed facility plays in the Applicant's plan for service coverage.
- 6.2 For Applications Which Include New or Reconstructed Tower Or Ground Mount: (a) A description of the support structure, proof of structural integrity, and the technical reasons for its design; (b) A visual study demonstrating compliance with the visibility and camouflage requirements of this Ordinance; (c) An engineer's certification that the facility has been designed with the maximum capacity for co-location in light of its dimensions.
- 6.3 Notice of Site Plan Review: In addition to the notice requirements specified in Section 5.5.3 of the Site Plan Review Regulations, any application for Site Plan Review of a Personal Wireless Service Facility shall include the name and mailing address of the municipal governing body of any municipality or portion thereof, which lies within a twenty mile radius of the proposed facility. Notice to such municipalities shall be provided in the same manner as specified for abutters. Municipalities within the twenty mile radius and their residents shall be allowed

to comment at any public hearing related to the application. Regional notification and comments from other municipalities or their residents shall not be construed to imply legal standing to challenge any decision.

[Re-number remaining sections.]

## **7. DIMENSIONAL REQUIREMENTS**

Personal wireless service facilities shall comply with the following requirements:

- 7.1 Height, Maximum: In no case shall a personal wireless service facility exceed two hundred (200) feet in height, unless the mount for the facility was greater than two hundred (200) feet in height prior to the adoption of this Ordinance.
- 7.2 Height, Existing Structures and Utility Poles: Carriers that locate new personal wireless service facilities on water towers, electric transmission and distribution towers, utility poles and similar existing utility structures, guyed towers, lattice towers, masts, and monopoles may be permitted to increase the height of those structures no more than twenty (20) feet.
- 7.3 Height, Other Existing Structures: The height of a personal wireless service facility shall not increase the height of a structure by more than fifteen (15) feet, unless the facility is completely camouflaged; for example a facility completely within a flagpole, steeple, or chimney. The increase in the height of the structure shall be in scale and proportion to the structure as originally configured. A carrier may locate a personal wireless service facility on a building that is legally nonconforming with respect to height, provided that the provisions of this Ordinance are met.
- 7.4 Height, Ground-Mounted Facilities: Ground-mounted personal wireless service facilities shall not project higher than (20) twenty feet above the average tree canopy height within a one hundred and fifty (150) foot radius of the mount, security barrier, or designated clear area for access to equipment, whichever is greatest.
- 7.5 Setbacks: All personal wireless service facilities and their equipment shelters shall comply with the building setback provisions of the zoning district in which the facility is located. Fences shall comply with the setback provisions of the zoning district in which the facility is located if the fence is six (6) feet or more in height, in accordance with the appropriate Zoning Ordinances.
- 7.6 Fall Zone for Ground Mounts: In order to ensure public safety, the minimum distance from the base of any ground-mount of a personal wireless service facility to any property line, public road, habitable dwelling, business, institutional use or public recreational area shall be, at a minimum, the distance equal to the fall zone, as defined in this Ordinance. The fall zone may cross property lines, so long as the applicant secures a fall zone easement from the affected property owner(s). The area of the easement shall be shown on all applicable plans submitted to the Town, and the terms of the easement shall be provided as part of the site plan review.

- 7.7 Fall Zone for Non-Ground Mounts: In the event that an existing structure is proposed as a mount for a personal wireless service facility, a fall zone shall not be required, but the setback provisions of the zoning district shall apply. In the case of pre-existing nonconforming structures, personal wireless service facilities and their equipment shelters shall not increase any non-conformities.

## 8. PERFORMANCE AND DESIGN STANDARDS

- 8.1 Visibility All personal wireless service facilities shall be designed and installed in such a manner that in the judgment of the Planning Board there shall be no unreasonable adverse visual impact on the area where the facility is located, and any adverse visual impact shall be adequately mitigated. In applying this standard, the board shall utilize the following standards:

- A. Visual impacts shall be determined on the basis of:
1. Change in community scale, as exhibited in relative height, mass or proportion of the personal wireless service facility within its proposed surroundings.
  2. New visible elements proposed on a contrasting background.
  3. Different colors and textures proposed against a contrasting background.
  4. Use of materials that are foreign to the existing built environment.
- B. Visual mitigation shall be determined on the basis of:
1. Conservation of opportunities to maintain community scale, e.g. buffering areas and low-lying buildings should not be compromised so as to start a trend away from the existing community scale.
  2. Amount and type of landscaping and /or natural vegetation.
  3. Preservation of view corridors, vistas, and view sheds.
  4. Continuation of existing colors, textures, and materials.

### 8.2 Camouflage

- A. Camouflage for Facilities on Existing Buildings or Structures – Roof Mounts: When a personal wireless service facility extends above the roof height of a building on which it is mounted, every effort shall be made to conceal or camouflage the facility within or behind existing or new architectural features to limit its visibility from public ways. Facilities mounted on a roof shall be stepped back from the front façade in order to limit their impact on the building’s silhouette.
- B. Camouflage for Facilities on Existing Buildings or Structures – Side Mounts: Personal wireless service facilities which are side mounted shall blend with the existing building’s architecture and the panels shall be painted or shielded with material consistent with the design features and materials of the building.

- C. Camouflage for Ground Mounted Facilities: All ground-mounted personal wireless service facilities shall be surrounded by an existing, fully-grown buffer of dense tree growth that extends continuously for a minimum distance of one hundred and fifty (150) feet from the mount, security barrier, or designated clear area for access to equipment, whichever is greatest, and screens views of the facility in all directions, as set forth in Figure 2, with the structure extending no more than twenty (20) feet above the canopy, as set forth in Section 6.2. These trees must be existing on the subject property, planted on site, or be within a landscape easement on an adjoining site. The Planning Board shall have the authority to decrease, relocate, or alter the required buffer based on on-site conditions. The one hundred and fifty (150) foot vegetative buffer area shall be protected by a landscape easement or be within the area of the carrier's lease. The easement or lease shall specify that the trees within the buffer shall not be removed or topped, unless the trees are dead or dying and present a hazard to persons or property.

**See Figure 2**

- 8.3 Color – To the extent that any personal wireless service facilities extend above the height of the vegetation immediately surrounding it they shall be of a color, which blends with the background or surroundings.
- 8.4 Equipment Shelters – Equipment shelters for personal wireless service facilities shall be designed consistent with one of the following design standards:
  - A. Equipment shelters shall be located in underground vaults; or
  - B. Equipment shelters shall be designed so that the shelters are architecturally consistent, with respect to materials and appearance, with the buildings in the area of the personal wireless service facility; or
  - C. Equipment shelters shall be camouflaged behind an effective year-round landscape buffer, equal to the height of the proposed building, and/or wooden fence if other types of camouflage are not feasible. The Planning Board shall determine the style of fencing and/or landscape buffer that is compatible with the neighborhood; or
  - D. If mounted on a rooftop, the equipment shelter shall be concealed or camouflaged so that the shelter either is not visible at grade or appears to be a part of the original structure.
- 8.5 Lighting, Signage, and Security
  - A. Lighting: The mounts of personal wireless service facilities shall be lighted only if required by the Federal Aviation Administration (FAA). Lighting of equipment structures and any other facilities

on site shall be shielded from abutting properties. Foot-candle measurements at the property line shall be 0.0 initial foot-candles.

- B. Signage: Signs shall be limited to those needed to identify the property and the owner and warn of any danger. All signs shall comply with the requirements of the Section 8.6 of the Charlestown Zoning Ordinance.
- C. Security Barrier: The Planning Board shall have final authority on whether a ground mounted personal wireless service facility should be surrounded by a security barrier.

8.6 Historic Buildings and Districts

- A. Any personal wireless service facility located on or within an historic structure shall not alter the character-defining features, distinctive construction methods, or original historic materials of the building.
- B. Any alteration made to an historic structure to accommodate a personal wireless service facility shall be fully capable of removal without compromising the architectural integrity of the structure to which it is attached.
- C. Personal wireless service facilities located on or within an historic structure shall be concealed within or behind existing architectural features, or shall be located so that they are not visible from public roads and viewing areas.

8.7 Scenic Landscapes and Vistas – Ground-mounted facilities shall not be located within open areas that are clearly visible from public roads, recreational areas, or abutting properties. A buffer of dense tree growth as per Section 7.2(C) shall surround all ground-mounted personal wireless service facilities.

8.8 Driveways – If available, existing entrances and driveways to serve a personal wireless service facility shall be utilized, unless the applicant can demonstrate that a new entrance and driveway will result in less visual, traffic, and environmental impact. New driveways to serve a personal wireless service facility shall not exceed twelve (12) feet in width. A gravel or crushed stone surface is encouraged. The construction and/or reconstruction of any new driveways shall conform to the Erosion Control and Sedimentation provisions of the Site Plan Review Regulations.

8.9 Antenna Types – Any antenna array placed upon an existing or proposed ground-mount, utility pole, or transmission line mount shall have a diameter of no more than four (4) feet, exclusive of the diameter of the mount. The Planning Board may permit a larger diameter antenna array after a finding that the visual impacts of a larger antenna array are negligible.

8.10 Ground and Roof Mounts – All ground mounts shall be of a mast type mount. Lattice towers, guyed towers, and roof-mounted monopoles are expressly prohibited, unless constructed as part of a reconstruction project permitted under Section 5.2.

8.11 Hazardous Waste – No hazardous waste shall be discharged on the site of any personal wireless service facility. If any hazardous materials are to be used on

site, there shall be provisions for full containment of such materials. An enclosed containment area shall be provided with a sealed floor, designed to contain at least one hundred and ten percent (110%) of the volume of the hazardous materials stored or used on the site.

- 8.12 Noise – Personal wireless service facilities shall not generate noise in excess of that permitted under the Charlestown Site Plan Review Regulations.
- 8.13 Radio Frequency Radiation (RFR) Standards – All equipment proposed for a personal wireless service facility shall be fully compliant with the FCC Guidelines for Evaluating the Environmental Effects of Radio Frequency Radiation (FCC Guidelines), under Report and Order, FCC 96-326, published on August 1, 1996, and all subsequent amendments.

## **9. MONITORING AND MAINTENANCE**

- 9.1 Maintenance – The owner of the facility shall maintain the personal wireless, service facility in good condition. Such maintenance shall include, but shall not be limited to, painting, structural integrity of the mount and security barrier, and maintenance of the buffer areas, fencing and landscaping.
- 9.2 Monitoring – As part of the issuance of the site plan approval or building permit, the property owner shall agree that the Town of Charlestown may enter the subject property to obtain RFR measurements and noise measurements at the expense of the carrier. The Town shall provide reasonable written notice to the carrier and landowner and provide them the opportunity to accompany the Town representatives when the measurements are conducted.
- 9.3 Security for Removal – Recognizing the hazardous situation presented by abandoned and unmonitored telecommunications facilities, the Planning Board shall set the form and amount of security that represents the cost for removal and disposal of abandoned telecommunications facilities in the event that a facility is abandoned and the facility owner is unwilling or unable to remove the facility in accordance with Section 9.2. The amount of the security shall be based upon the actual removal cost plus fifteen percent (15%), based on information provided by the applicant and certified by a professional civil or structural engineer licensed in New Hampshire, every five (5) years from the date of the Planning Board's approval of the site plan. If the cost has increased more than fifteen percent (15%), the owner of the facility shall provide additional security in the amount of the increase.
- 9.4 Subleases and Transfers Of Ownership. Any new lease, sublease, or transfer of ownership of any facility permitted under this Ordinance shall be reported to the Town of Charlestown, and adequate provision made for the continuation of security under this section. Violation of this section shall be grounds for revocation of site plan approval.

## **10. ABANDONMENT OR DISCONTINUATION OF USE**

- 10.1 Notification – At such time that a carrier plans to abandon or discontinue operation of a personal wireless service facility, such carrier will notify the Town by certified U.S. mail of the proposed date of abandonment or discontinuation of operations. Such notice shall be given no less than thirty (30) days prior to abandonment or discontinuation of operations. In the event that a carrier fails to give such notice, the personal wireless service facility shall be considered abandoned upon such discontinuation of operations.
- 10.2 Removal – Upon abandonment or discontinuation of use, the owner of the facility shall physically remove the personal wireless service facility within ninety (90) days from the date of abandonment or discontinuation of use. “Physically remove” shall include, but not be limited to:
- A. Removal of antennas, mount, equipment shelters and security barriers from the subject property.
  - B. Proper disposal of the waste materials from the site in accordance with local and state solid waste disposal regulations.
  - C. Restoring the location of the personal wireless service facility to its natural condition, except that any landscaping and grading shall remain in the after-condition.
- 10.3 Failure to Remove – If the owner of the facility does not remove the facility upon the Zoning Administrator’s order, then the Selectboard shall, after holding a public hearing with notice to the owner and abutters, issue a declaration of abandonment. The owner of the facility shall dismantle and remove the facility within ninety (90) days of receipt of the declaration of abandonment by the Selectboard. If the abandoned facility is not removed within ninety (90) days, the Town may execute the security to pay for this action.

## 11. APPEALS

In accord with RSA 676:5, III, appeals of the decision of the Planning Board in administering this ordinance may be made to Superior Court, as provided in RSA 677:15.

## 12. CERTIFICATION

I hereby certify that the foregoing is a true copy of the Personal Wireless Facilities Ordinance, as approved by Charlestown voters at the Annual Town Meeting held on Tuesday, March 13, 2001.

Signed \_\_\_\_\_  
Richard St. Pierre, Planning Board Chair

Received this \_\_\_\_\_ day of March, 2001.

As adopted March 13, 2001

\_\_\_\_\_ Seal  
Debra J. Clark, Charlestown Town Clerk